



PCT09

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,690

DATE: 05/08/2002

TIME: 13:32:32

Input Set : A:\20829-1.app

Output Set: N:\CRF3\05082002\I743690.raw

p.6

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3 <110> APPLICANT: Christeller, John Tane
4   Sutherland, Paul William
5   Murray, Colleen
6   Markwick, Ngairi Patricia
7   Philip, Bruce Allan
8   Malone, Louise Anne
9   Burgess, Elisabeth Phyllis
10  Phung, Margaret Mary
11  Phung, Thai Hong
12  The Horticulture and Food Research Institute of
13  New Zealand Limited
15 <120> TITLE OF INVENTION: Chimeric Polypeptides Allowing Expression of
16  Plant-Noxious Proteins
18 <130> FILE REFERENCE: 020829-000100US
20 <140> CURRENT APPLICATION NUMBER: US 09/743,690
21 <141> CURRENT FILING DATE: 2001-01-12
23 <150> PRIOR APPLICATION NUMBER: NZ 331002
24 <151> PRIOR FILING DATE: 1998-07-15
26 <150> PRIOR APPLICATION NUMBER: WO PCT/NZ99/00110
27 <151> PRIOR FILING DATE: 1999-07-15
29 <160> NUMBER OF SEQ ID NOS: 18
31 <170> SOFTWARE: PatentIn Ver. 2.1
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35 <212> TYPE: DNA
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44 <222> LOCATION: (1)..(324)
45 <223> OTHER INFORMATION: PPI-I/pUC19
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49 ctcttggtcac gaaaagaaag tgatggacca gagatcttag aacttcaaaa ggaatttgaa 120
50 tgcaatggaa aacaaaggtg gccagaactt attggtgtac caacaaagct tgctaagggg 180
51 ataattgaga aggaaaattc actcataact aatgttcaga tactactgaa tggttctcca 240
52 gtcacaatgg attatcgttg taatcgaggt cgtctttttg ataacatttt ggggtgatgtt 300
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56 <210> SEQ ID NO: 2
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58 <212> TYPE: DNA

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77 cccgtgtgtg ctgtgtgtgc tgtcagcctt ggtctgtgtg gctcccgga tccctgccag 120
78 aaagtgtctg ctgactgga aatggaccaa cgatctgggc tccaacatga ccacatcaaa 180
79 tgtgaacagc agaggtgaat tcacaggcac ctacatcaca gccgtaacag ccacatcaaa 240
80 tgagatcaaa gagtcaccac tgcattggac acaaaacacc atcaacaaga ggaccagcc 300
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82 gtgcttcata gacaggaatg ggaaggaggt cctgaagacc atgtggctgc tgcggtcaag 420
83 tgttaatgac attggtgatg actggaaagc taccagggtc ggcattcaaca tcttactctg 480
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100 <223> OTHER INFORMATION: streptavidin (Streptavidin/pUC19)
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105 taacgctgaa agccgttatg ttctgacagg tcgttacgac tctgtctcgg ctaccgacgg 180
106 ttctgttact gctctgggtt ggaccgttgc ttggaaaaac aactaccgta acgctcactc 240
107 tgctaccacc tggctgtggc agtacgttgg tgggtgtgaa gctcgtatca acaccagtg 300
108 gctgctgacc tctgttacca ccgaagctaa cgcttggaat tctaccctgg ttggtcacga 360
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133 ttcctttact cctttgtttt aaaaaataaa aaaacaaaaa aaatcttggt ttatacatat 120
134 atatacacac aagtagtttt atttttttcc tttatattat atttggtgta ggaatatttc 180
135 tacttgtagt cgtggtggaa catgttgatg cgaagatctg tactaaagaa tgtggtaatc 240
136 ttgggtttgg gatatgccca cggtcagaag gaagtcgcaa aaatcccata tgcatacaatt 300
137 gttgctcagg ctataagggg tgtaattatt atagtgtttt cgggagattt atttgcgaa 360
138 gagaatctga cctaaaaaac ccaaaagcgt gccccctaaa ttgtgataca aatattgcct 420
139 attcaagatg cccccattca gaaggaaaat cgctaattta tcccaccgga tgtaccacat 480
140 gttgcacagg gtacaagggg tgctactatt tcggtaaaaa tggcaagttt gtatgcgaag 540
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151 site
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166 <220> FEATURE:
167 <221> NAME/KEY: CDS
168 <222> LOCATION: (1)..(486)
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174 gggaaatgga ccaacgatct gggctccaac atgaccatcg gggctgtgaa cagcagaggt 180
175 gaattcacag gcacctacat cacagccgta acagccacat caaatgagat caaagagtca 240
176 ccattgcatg ggacacaaaa caccatcaac aagaggaccc agcccacctt tggcttcacc 300
177 gtcaattgga agttttcaga gtccaccact gtcttcacgg gccagtgtt catagacagg 360
178 aatgggaagg aggtcctgaa gaccatgtgg ctgctgcgg caagtgttaa tgacattggt 420
179 gatgactgga aagctaccag ggtcggcatc aacatcttca ctcgcctgcg cacacagaag 480
180 gagtga 486

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Input Set : A:\20829-1.app

Output Set: N:\CRF3\05082002\I743690.raw

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194 1 5 10 15
195 Pro Phe Glu Thr Leu Leu Ala Arg Lys Glu Ser Asp Gly Pro Glu Ile
196 20 25 30
197 Pro Ala Arg Lys Cys Ser Leu Thr Gly Lys Trp Thr Asn Asp Leu Gly
198 35 40 45
199 Ser Asn Met Thr Ile Gly Ala Val Asn Ser Arg Gly Glu Phe Thr Gly
200 50 55 60
201 Thr Tyr Ile Thr Ala Val Thr Ala Thr Ser Asn Glu Ile Lys Glu Ser
202 65 70 75 80
203 Pro Leu His Gly Thr Gln Asn Thr Ile Asn Lys Arg Thr Gln Pro Thr
204 85 90 95
205 Phe Gly Phe Thr Val Asn Trp Lys Phe Ser Glu Ser Thr Thr Val Phe
206 100 105 110
207 Thr Gly Gln Cys Phe Ile Asp Arg Asn Gly Lys Glu Val Leu Lys Thr
208 115 120 125
209 Met Trp Leu Leu Arg Ser Ser Val Asn Asp Ile Gly Asp Asp Trp Lys
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222 <223> OTHER INFORMATION: Description of Artificial
223 Sequence:PPI-II/Streptavidin gene fusion
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226 <221> NAME/KEY: CDS
227 <222> LOCATION: (1)..(626)
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231 <221> NAME/KEY: modified_base
232 <222> LOCATION: (585)
233 <223> OTHER INFORMATION: n = g, a, c or t
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237 ttccttttact cctttgtttt aaaaaataaa aaaacaaaaa aaatccttgg ttatacatat 120
238 atatacacac aagtagtttt atttttttcc tttatattat atttgttgta ggaatatttc 180
239 tacttgtag cgtggtggaa catgttgatg cgaagatctg tactaagaat tcgcatatgg 240

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 241 ctggtgctga cggtgcaactg accggtactt acgaaagcgc tgttggtaac gctgaaagcc 360  
 242 gttatgttct gaccggtcgt tacgactctg ctccggctac cgacggttct ggtactgctc 420  
 243 tgggttggtgac cggttgcttg aaaaacaact accgtaacgc tcaactctgt accacctggt 480  
 244 ctggccagta cggttggtggt gctgaagctc gtatcaacac ccagtggctg ctgacctctg 540  
 245 **gtaccaccga agctaacgct tggaaatcta ccctggttgg tcacnacacg ttcaccaaag** 600  
 246 ttaaaccgtc tgcgtcttct atctag 626

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250 &lt;211&gt; LENGTH: 168

251 &lt;212&gt; TYPE: PRT

252 &lt;213&gt; ORGANISM: Artificial Sequence

254 &lt;220&gt; FEATURE:

255 &lt;223&gt; OTHER INFORMATION: Description of Artificial

256 Sequence:PPI-II/Streptavidin fusion protein

258 &lt;400&gt; SEQUENCE: 9

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 260 1 5 10 15  
 261 Leu Gly Ile Phe Leu Leu Val Ser Val Glu His Val Asp Ala Lys  
 262 20 25 30  
 263 Ile Cys Thr Lys Asn Ser His Met Ala Glu Ala Gly Ile Thr Gly Thr  
 264 35 40 45  
 265 Trp Tyr Asn Gln Leu Gly Ser Thr Phe Ile Val Thr Ala Gly Ala Asp  
 266 50 55 60  
 267 Gly Ala Leu Thr Gly Thr Tyr Glu Ser Ala Val Gly Asn Ala Glu Ser  
 268 65 70 75 80  
 269 Arg Tyr Val Leu Thr Gly Arg Tyr Asp Ser Ala Pro Ala Thr Asp Gly  
 270 85 90 95  
 271 Ser Gly Thr Ala Leu Gly Trp Thr Val Ala Trp Lys Asn Asn Tyr Arg  
 272 100 105 110  
 273 Asn Ala His Ser Ala Thr Thr Trp Ser Gly Gln Tyr Val Gly Gly Ala  
 274 115 120 125  
 275 Glu Ala Arg Ile Asn Thr Gln Trp Leu Leu Thr Ser Gly Thr Thr Glu  
 276 130 135 140  
 277 Ala Asn Ala Trp Lys Ser Thr Leu Val Gly His Asp Thr Phe Thr Lys  
 278 145 150 155 160  
 279 Val Lys Pro Ser Ala Ala Ser Ile  
 280 165

283 &lt;210&gt; SEQ ID NO: 10

284 &lt;211&gt; LENGTH: 638

285 &lt;212&gt; TYPE: DNA

286 &lt;213&gt; ORGANISM: Streptomyces avidinii

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289 &lt;221&gt; NAME/KEY: CDS

290 &lt;222&gt; LOCATION: (50)..(601)

291 &lt;223&gt; OTHER INFORMATION: streptavidin

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294 &lt;221&gt; NAME/KEY: sig\_peptide

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296 &lt;223&gt; OTHER INFORMATION: signal sequence

RAW SEQUENCE LISTING ERROR SUMMARY  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:15; N Pos. 1  
Seq#:16; N Pos. 1